

# FACT SHEET ON ANTHRAX

## What is anthrax?

Anthrax is a rare infectious disease caused by the bacterium *Bacillus anthracis*. It can occur in wild and domestic hoofed animals, especially cattle, sheep, goats, camels, and antelopes. It can also occur in humans when they are exposed to the bacterium. There are three forms of anthrax infection: cutaneous (skin), inhalation (lungs), and gastrointestinal (stomach and intestine). If people have been intentionally exposed, as in a bioterrorist release, breathing in the spores or contact with skin would be the most likely routes of exposure.

## How common is anthrax and who can get it?

Anthrax can be found globally. It is most common in agricultural regions where it occurs in animals. It is more common in developing countries or countries without veterinary public health programs. Anthrax is reported more often in some regions of the world (South and Central America, Southern and Eastern Europe, Asia, Africa, the Caribbean, and the Middle East) than in others and is extremely rare in the United States. When anthrax affects humans, it is usually due to an occupational exposure to infected animals or their products. However, anthrax is considered to be one of a number of potential agents for use in biological terrorism.

## How is anthrax spread?

Getting anthrax from another person is very rare. Anthrax is generally spread through the following three methods: Skin (cutaneous) - Most anthrax infections occur when people touch contaminated animal products like wool, bone, hair, and hide. The infection occurs when the bacteria enters a cut or scratch in the skin.

**Inhalation** - Some anthrax infections occur when people breathe in the spores of the bacteria. (A spore is the form that certain bacteria take in unfavorable growing conditions. When in better conditions, like the human lung, the bacteria will begin to grow and cause disease.)

**Gastrointestinal** - Some people may get anthrax by eating infected meat.

## What are the symptoms of anthrax?

**Skin (cutaneous)** - First, the exposed skin itches. Then, a large boil-like sore appears. The sore becomes a black scab. If not treated, the infection can spread to the lymph nodes and bloodstream.

**Inhalation** - First, people have cold or flu-type symptoms. These symptoms can get worse, result in serious breathing problems, and cause some people to stop breathing.

**Gastrointestinal** - People may have fever; pain in their abdomen; loose, watery bowel movements; and blood in their vomitus.

## How soon after exposure would symptoms develop?

Symptoms develop between one and seven days after exposure but prolonged periods up to 60 days are possible.

## Can anthrax be spread person to person?

Inhalation (lung) anthrax is not spread from person to person. Even if you develop symptoms of inhalation anthrax, you are not contagious to other persons. If you develop cutaneous (skin) anthrax, the drainage from an open sore

presents a low risk of infection to others. The only way cutaneous (skin) anthrax can be transmitted is by direct contact with the drainage from an open sore. Anthrax is not spread from person to person by casual contact, sharing office space, or by coughing and sneezing.

### **How is anthrax diagnosed?**

Anthrax is diagnosed when the *Bacillus anthracis* bacterium is found in the blood, skin lesions, or respiratory secretions by a laboratory culture. It can also be diagnosed by measuring specific antibodies in the blood of infected persons.

### **What is the treatment?**

There are several antibiotics that are used successfully to treat anthrax. The United States has a large supply of these antibiotics and can quickly manufacture even more if needed.

### **Is there a way to prevent infection?**

Persons exposed to anthrax spores via a bioterrorist act will be given antibiotics to prevent infection. There is a vaccine against anthrax, but it is not generally available, nor is it recommended except for those at high risk, such as laboratory scientists handling the bacterium or members of the armed forces.

### **Do I need to disinfect myself or my belongings if I believe I was exposed to anthrax?**

Most threats regarding anthrax have proven to be hoaxes. However, in the event of a possible exposure, there are certain actions to take to avoid possible infection. If you have a skin exposure, you can shower with soap and water to reduce the chance of getting the cutaneous or gastrointestinal forms of the disease. Your clothes do not pose any significant health risk to you. Washing the clothes in the regular laundry will safely remove any possible anthrax. You do not need to discard the clothes. To be inhaled, anthrax spores must first be aerosolized (dispersed in the air) which is difficult to do. In the unlikely event that you inhale spores, medical evaluation and treatment is needed.

**For more information or questions about Anthrax call 757-683-8384.**